

Notice of Allowability**Application No.**

10/059,928

Applicant(s)

DAAGE ET AL.

Examiner

Jonas N. Strickland

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the after-final amendment filed on 11/20/03.
2. ☒ The allowed claim(s) is/are 1-25.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

Allowable Subject Matter

1. Claims 1-25 are allowed.
2. The following is an examiner's statement of reasons for allowance: The instant application is condition for allowance, because the cited prior art fails to disclose a process for forming an active catalyst from a used hydrocarbon containing, supported catalyst comprising one or more metals, selected from the group consisting of Co, Ni, Cu, Ru, Rh, Re, Pd, Pt, Os, and Ir, the process comprising the steps of decreasing the hydrocarbon content of the used catalyst to produce a low hydrocarbon content catalyst; impregnating the low hydrocarbon content catalyst under a non-oxidative atmosphere with a solution of at least one of an ammonium salt and an alkyl ammonium salt and oxidizing the impregnated catalyst with a gaseous oxidant in the presence of the impregnating solution to produce an oxidized catalyst and then reducing the oxidized catalyst with a hydrogen gas at elevated temperatures to form an active catalyst.

The Examiner has cited Lapidus et al., because it discloses a process for the preparation of high activity carbon monoxide hydrogenation catalysts, especially for Fischer-Tropsch reactions. Lapidus et al. continues to disclose wherein the catalyst contains cobalt as well as rhenium or metals from Group VIIB, which are supported on a refractory inorganic oxide support (col. 1, lines 34-37 and col. 2, lines 20-31). Lapidus et al. continues to disclose wherein the catalyst is contacted with a liquid or solution (a solvent, which would inherently decrease the hydrocarbon content; col. 3, lines 39-41). Lapidus et al. continues to disclose impregnating the catalyst with a poly- or multidentate ligand compound, such as an ammonium containing salt (col. 5, line 55 -

col.6, line 38). Lapidus et al. continues to disclose wherein after impregnation, the catalyst may be dried, and calcined; suitably by contact with oxygen, air or other oxygen containing gases, as well as wherein the catalyst is reduced with a hydrogen-containing gas (col. 2, lines 1-6). The oxidation step occurs at 100°C (col. 5, line 21). Lapidus et al. continues to disclose wherein the catalyst is reduced under hydrogen at 400°C (col. 16, lines 43-45).

However, Lapidus et al. treats his catalyst with chelating agents that include ammonium slats, but he does not do so in the presence in a non-oxidizing atmosphere. Finally, Lapidus does not oxidize the catalyst in the presence of the impregnating solution.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonas N. Strickland whose telephone number is 703-306-5692. The examiner can normally be reached on M-TH, 7:30-5:00, off 1st Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 703-308-3837. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Application/Control Number: 10/059,928

Page 4

Art Unit: 1754

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-0661.



Jonas N. Strickland
December 10, 2003